

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application and reflects the amendment of claims 1 and 23, and the addition of new claim 25.

Listing of Claims:

1. (Currently Amended) A process for cleaning metals comprising the steps of
(a) preparing an aqueous cleaning solution by combining a stabilized hydrogen peroxide solution with at least one mineral acid and water;

wherein said stabilized hydrogen peroxide solution consists of: (i) hydrogen peroxide in an amount from about 20 to about 70 wt%, based on the entire hydrogen peroxide solution; (ii) at least one complexing agent selected from the group consisting of 1-hydroxyethylidene-1, 1-diphosphonic acid, salts and degradation products thereof in an amount from about 10 to about 60 wt% based on the amount of hydrogen peroxide; and (iii) water; and (iv) components other than (i) through (iii) in an amount from 0 up to about 10 wt%, based on the amount of hydrogen peroxide; and

wherein said stabilized hydrogen peroxide solution is combined with said at least one mineral acid and said water in an amount to provide a cleaning solution which comprises from about 0.5 to about 20 wt% hydrogen peroxide;

(b) contacting a metal with said cleaning solution; and

(b) cleaning said metal via said contacting step.

2. (Previously Presented) A process as claimed in claim 1, wherein said complexing agent is in an amount from about 20 to about 50 wt% based on the amount of hydrogen peroxide present in said stabilized hydrogen peroxide solution.

3. (Previously Presented) A process as claimed in claim 2, wherein said complexing agent is in an amount from about 35 to about 45 wt% based on the amount of hydrogen peroxide present in said stabilized hydrogen peroxide solution.

4.-7. (Cancelled)

8. (Previously Presented) A process as claimed in claim 1, wherein the mineral acid comprises sulfuric acid.

9. (Previously Presented) A process as claimed in claim 8, wherein the sulfuric acid is present in an amount from about 0.5 to about 20 wt%.

10. (Previously Presented) A process as claimed in claim 1, wherein the cleaning solution comprises at least one surfactant.

11. (Previously Presented) A process as claimed in claim 10, wherein the cleaning solution comprises at least one non-ionic surfactant.

12. (Original) A process as claimed in claim 1, wherein the metal is selected from the group consisting of aluminium, copper and steel.

13. – 16. (Cancelled)

17. (Previously Presented) A process as claimed in claim 1, wherein said aqueous cleaning solution has a pH of from about 0 to about 7.

18. (Previously Presented) A process as claimed in claim 1, wherein said aqueous cleaning solution has a pH of from about 0 to about 6.

19. (Cancelled)

20. (Previously Presented) A process as claimed in claim 1, wherein said aqueous cleaning solution has a pH of from about 0.5 to about 5.

21.-22. (Cancelled)

23. (Currently Amended) A process for cleaning and passivating metals, comprising the steps of:

(a) providing an aqueous solution comprising:

hydrogen peroxide in an amount of from about 0.5 to about 20 wt%, at least one mineral acid, and at least one compound selected from the group consisting of

complexing agents based on phosphonic acids, salts and degradation products thereof in an amount from about 10 to about 60 wt% based on the amount of hydrogen peroxide, the remainder being water; and

- (b) contacting said metal with said solution at a temperature in the range of about 20 to about 80°C for a time period from about 10 seconds to about 2 hours, wherein only a small amount of metal is dissolved in said solution sufficient to effect cleaning and less than an amount of time to effect etching; and
- (c) passivating said metal via said contacting step.

24. (Previously Presented) A process as claimed in claim 23, wherein said aqueous solution has a pH of from about 0 to about 6, and wherein the complexing agent is based on at least one compound selected from the group consisting of 1-hydroxyethylidene-1, 1-diphosphonic acid, salts and degradation products thereof.

25. (New) A process as claimed in claim 23, wherein said contacting step is carried out under conditions wherein at least about 41% of the initial amount of hydrogen peroxide remains in said solution after the contacting step.